## Index of Claims

## Application/Control No.

Rodney P. Swartz, Ph.D.

Applicant(s)/Patent under Reexamination

10/534,082 Examiner

HINUMA ET AL. Art Unit

Rejected Allowed

(Through numeral) Cancelled Restricted

Non-Elected N Interference

Appeal A l٥ Objected

1645

|            |          | _        | _ |          |          |          | -        |          | _        | _        |      |       |          |        |          |   | _ |          |          |          |           |          |     |       |          | _       | _ |          |               |          |          | _          |        |          |
|------------|----------|----------|---|----------|----------|----------|----------|----------|----------|----------|------|-------|----------|--------|----------|---|---|----------|----------|----------|-----------|----------|-----|-------|----------|---------|---|----------|---------------|----------|----------|------------|--------|----------|
| Claim Date |          |          |   |          |          |          |          | Cla      | aim      | Г        | Date |       |          |        |          |   |   |          | - 1      | Ck       | aim       | Date     |     |       |          |         |   |          |               |          |          |            |        |          |
| Final      | Original | 1/4/11   |   |          |          |          |          |          |          |          |      | Final | Original | 1/4/11 |          |   |   |          |          |          |           |          |     | Final | Original |         |   |          |               |          |          |            |        |          |
| _          | 1        | -        | Н | -        | ⊢        | -        | ⊢        | Ͱ        | ╀        | ╁        | ł    | _     | 51       | Н      | Н        | - | Н | $\dashv$ | -        | $\dashv$ | $\dashv$  | $\dashv$ | -   |       | 101      | Н       | Н | -        | Н             | $\dashv$ | $\dashv$ | +          | +      | -        |
| _          | 2        | ÷        | Н | -        | ⊢        | $\vdash$ | ⊢        | ╁        | -        | ╁        | 1    | _     | 52       | Н      | -        | _ | Н | $\dashv$ | -        | $\dashv$ | _         | $\dashv$ |     | -     | 102      | Н       | Н | -        | -             | $\dashv$ | $\dashv$ | +          | -      | -        |
| _          | 3        | -        | Н | -        | ⊢        | $\vdash$ | +        | ⊢        | ╌        | ╁        | 1    | _     | 53       | Н      | $\vdash$ | _ | Н | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  | ⊣        |     |       | 103      | Н       | Н | -        | Н             | $\dashv$ | $\dashv$ | $\dashv$   | +      | Η.       |
| _          | 4        | -        | Н | _        | ⊢        | $\vdash$ | +        | +        | $\vdash$ | ┢        | 1    | -     | 54       | Н      | -        | _ | Н | $\vdash$ | _        | _        | _         | $\dashv$ |     | -     | 104      | Н       | Н |          | -             | $\dashv$ | $\dashv$ | $\dashv$   | +      | Η.       |
| _          | 5        | -        | Н | Н        | -        | $\vdash$ | $\vdash$ | Н        | -        | 1        | 1    |       | 55       | Н      | Н        | - | Н | $\vdash$ |          | _        |           | ⊣        | - 1 |       | 105      | Н       | Н | -        |               | $\dashv$ | $\dashv$ | $\dashv$   | +      | Η.       |
|            | 6        | -        |   |          |          |          | 1        | $\vdash$ | $\vdash$ | $\vdash$ | 1    |       | 56       | Н      | Н        |   |   | Н        |          | _        |           | $\dashv$ |     |       | 106      | Н       | Н |          |               | $\neg$   | $\dashv$ | _          | +      | ┥.       |
|            | 7        | -        | Н | Н        |          | t        | t        | t        | Н        | t        | ı    |       | 57       | Н      | Н        | Н |   | Н        |          | _        |           | ┪        | - 1 |       | 107      | Н       | Н | Н        |               | $\neg$   |          | _          | +      | ┨        |
|            | 8        | -        |   |          |          |          | t        | t        | Т        | T        | i    |       | 58       | П      | П        |   |   | П        |          | _        |           | ┪        | - 1 |       | 108      | П       | П |          |               | $\neg$   |          | _          | $^{+}$ | ┪        |
|            | 9        | =        |   |          |          |          | T        | Т        | Т        |          | ĺ    |       | 59       | П      | П        |   |   | П        |          | ヿ        |           | ヿ        | - 1 |       | 109      | П       | П |          |               | $\neg$   |          | $\neg$     | 十      | ٦.       |
|            | 10       |          |   |          |          |          |          | Г        |          |          | ĺ    |       | 60       | -      |          |   |   | П        |          | ヿ        |           | ╗        | - 1 |       | 110      | П       | П |          | _             | $\neg$   |          | $\neg$     | 十      | ٦.       |
|            | 11       |          |   |          |          |          | 1        |          | Г        |          | 1    |       | 61       |        |          |   |   |          |          | $\neg$   |           | ╗        | - 1 |       | 111      |         |   |          |               |          |          |            | Т      | ٦        |
|            | 12       |          |   |          | L        | L        | L        | L        | L        | L        | ]    |       | 62       | =      |          |   |   |          |          |          |           |          |     |       | 112      |         |   |          |               |          |          | J          | I      |          |
|            | 13       |          |   |          | Г        | Π        | Г        | Г        | Г        | Γ        | ]    |       | 63       | =      |          |   |   |          |          | I        |           | ⊐        |     |       | 113      |         |   |          |               | П        | П        | T          | Τ      |          |
|            | 14       |          |   |          |          |          |          |          |          |          | ]    |       | 64       | =      |          |   |   |          |          |          |           |          |     |       | 114      |         |   |          |               |          |          |            | $\Box$ |          |
|            | 15       | -        |   |          |          |          |          |          | 匚        |          | Į    |       | 65       |        |          |   |   | П        |          | _[       |           | ⊐        |     |       | 115      |         |   |          |               |          | ⊐        |            |        | _]       |
|            | 16       | -        | Ш |          | Ш        |          | 上        | 上        | Ш        | ┖        | Į    |       | 66       | -      |          |   |   |          |          |          |           | _        |     |       | 116      | Ш       | Ш |          |               | _        |          | _          |        | _        |
|            | 17       |          |   |          |          |          | ┖        | Ш        | Ш        |          | l    |       | 67       |        |          |   |   |          |          |          |           |          | - 1 |       | 117      | Ш       |   |          |               | _        |          | _          |        |          |
|            | 18       | _        |   |          |          | ┖        | ┖        | ┖        | ╙        |          | Į    |       | 68       | ш      |          |   |   | Ш        |          | _        |           | _        | ı   |       | 118      | ш       |   |          |               | _        |          | _          | _      | _        |
|            | 19       | _        |   |          |          |          |          |          | ╙        |          | Į    |       | 69       | -      |          |   |   | Ш        |          | _        |           | _        | ı   |       | 119      |         | Ш |          |               | _        |          | _          | _      | _        |
|            | 20       | _        |   |          | _        | $\perp$  | 上        | ┖        | ╙        | ╙        | Į    |       | 70       | -      |          |   |   | Ц        | _        | _        |           | _        | ı   |       | 120      | ш       | ш | $\perp$  | _             | _        | _        | _          | _      | _        |
|            | 21       | _        |   |          | _        | ╙        | ╙        |          | ╙        |          | Į    |       | 71       | -      |          |   |   | Ц        |          | _        |           | _        | ı   |       | 121      | Ш       |   | Ш        |               | _        | _        | _          | _      | 4        |
|            | 22       | _        |   |          |          |          | _        |          | ╙        |          | Į    |       | 72       | -      |          |   |   | Ш        |          | _        |           | _        | ı   |       | 122      | ш       |   |          |               | _        |          | _          | _      | 4        |
|            | 23       |          | Ш |          | _        | _        | _        | _        | ┖        | _        | Į    |       | 73       | -      | ш        |   |   | Н        |          | _        | _         | 4        | - 1 |       | 123      |         | ш |          |               | _        |          | _          | _      | 4        |
|            | 24       | -        | Ш |          | <u> </u> | _        | ⊢        | ⊢        | ⊢        | ⊢        | Į.   |       | 74       | ш      | ш        |   | Н | Н        | _        | _        | _         | _        | - 1 |       | 124      | $\perp$ | Н |          |               | _        | _        | _          | _      | 4        |
|            | 25       | -        | Н |          | -        | -        | ⊢        | -        | ⊢        | -        | Į.   |       | 75       | ш      | ш        |   |   | Н        |          | -        |           | 4        | - 1 |       | 125      |         | Н |          |               | _        | _        | -          | _      | 4        |
| _          | 26       | =        | Н | _        | ⊢        | $\vdash$ | ⊢        | ⊢        | ⊢        | ⊢        |      |       | 76       | Н      | Н        |   | Н | Н        | _        | -        | _         | -        | - 1 |       | 126      | Н       | Н |          | _             | $\dashv$ | _        | $\dashv$   | -      | 4        |
| _          | 27<br>28 | =        | Н | _        | ⊢        | ⊢        | ⊢        | ⊢        | ⊢        | ⊢        |      | _     | 77<br>78 | Н      | Н        |   | Н | Н        | -        | $\dashv$ | -         | -        | -   |       | 127      | Н       | Н |          | Н             | $\dashv$ | _        | -          | +      | -        |
| _          | 29       | -        | Н | _        | ⊢        | ⊢        | ⊢        | ⊢        | ⊢        | +        | 1    | _     | 79       | Н      | Н        | _ | Н | $\vdash$ | -        | $\dashv$ | -         | $\dashv$ | - 1 |       | 129      | Н       | Н | _        | _             | $\dashv$ | $\dashv$ | +          | +      | -        |
| _          | 30       | ⊢        | Н | _        | ⊢        | $\vdash$ | ⊢        | $\vdash$ | ⊢        | $\vdash$ | 1    | _     | 80       | Н      | Н        | - | Н | Н        | -        | $\dashv$ | -         | $\dashv$ | -   |       | 130      | Н       | Н | -        | Н             | $\dashv$ | $\dashv$ | +          | +      | +        |
| _          | 31       | $\vdash$ | Н | $\vdash$ | ⊢        | $\vdash$ | +        | +        | ⊢        | $\vdash$ | 1    | _     | 81       | Н      | Н        | - | Н | Н        | -        | $\dashv$ | -         | $\dashv$ | -   |       | 131      | Н       | Н | $\vdash$ | Н             | $\dashv$ | $\dashv$ | +          | +      | Η.       |
| _          | 32       | $\vdash$ | Н | _        | Н        | -        | +        | $\vdash$ | Н        | $\vdash$ | 1    | _     | 82       | Н      | Н        | _ | Н | Н        | _        | $\dashv$ | _         | ⊣        | - 1 |       | 132      | Н       | Н | _        |               | $\dashv$ | $\dashv$ | $\dashv$   | +      | Η.       |
| _          | 33       | $\vdash$ | Н | _        | Н        | $\vdash$ | +        | $\vdash$ | $\vdash$ | $\vdash$ | 1    | _     | 83       | Н      | Н        | _ | Н | $\dashv$ | $\neg$   | _        | -         | ⊣        |     |       | 133      | Н       | Н | -        |               | $\dashv$ | $\dashv$ | +          | +      | $\dashv$ |
| _          | 34       | $\vdash$ | Н | _        | ⊢        | $\vdash$ | +        | +        | -        | ┰        | 1    | _     | 84       | Н      | _        | _ | Н | $\vdash$ | $\neg$   | _        | -         | ⊣        |     | -     | 134      | Н       | Н |          | -             | $\dashv$ | $\dashv$ | +          | +      | Η.       |
| _          | 35       | _        | - | _        | $\vdash$ | $\vdash$ | ✝        | 1        | 1        | 1        | 1    | _     | 85       | Н      | _        | _ | _ | $\neg$   | $\neg$   | 7        | $\neg$    | ┪        |     | -     | 135      | Н       | Н | -        | $\overline{}$ | $\neg$   | $\neg$   | 7          | _      | ٦.       |
| _          | 36       | $\vdash$ | Н | Т        | $\vdash$ | $\vdash$ | $\vdash$ | 1        | -        | т        | 1    | -     | 86       | Н      | Н        | - |   | $\vdash$ |          | _        |           | ┪        | - 1 |       | 136      | Н       | П |          |               | $\neg$   | $\neg$   | $\neg$     | +      | ┪        |
|            | 37       | т        | П | Н        |          | T        | T        | т        | т        | T        | i    |       | 87       | П      | Н        | Н | Н | H        |          | 7        | $\exists$ | ⊣        |     |       | 137      | т       | Н | П        | Н             | $\neg$   | $\dashv$ | $\dashv$   | $^{+}$ | ٦.       |
|            | 38       |          |   | _        |          |          |          |          |          |          | 1    |       | 88       |        |          |   |   |          |          |          |           |          |     |       | 138      |         |   |          |               | $\neg$   |          |            | 7      | ٦.       |
|            | 39       |          |   |          |          | Т        |          | $\vdash$ | $\vdash$ | _        |      |       | 89       |        |          |   |   |          |          |          |           |          | П   |       | 139      |         | П | П        |               | _        | $\neg$   | _          | 十      | 1        |
|            | 40       |          |   |          |          |          |          |          | Г        | Т        |      |       | 90       |        | П        | П |   | П        |          |          |           | -1       | П   |       | 140      |         | П | П        |               |          | $\neg$   |            | $\top$ | 7        |
|            | 41       |          |   |          |          |          |          |          | Г        | Г        |      |       | 91       |        |          |   |   | П        |          |          |           | -1       | П   |       | 141      |         | П |          |               | $\neg$   | $\neg$   |            | $\top$ | 7        |
|            | 42       |          | П |          |          |          |          |          | Г        | Г        |      |       | 92       |        |          |   |   |          |          |          |           | -1       | П   |       | 142      |         |   |          |               | $\neg$   | $\neg$   |            | T      | 7        |
|            | 43       |          |   |          |          |          |          |          | Г        | Г        |      |       | 93       |        |          |   |   |          |          |          |           | -1       |     |       | 143      |         |   |          |               | $\neg$   | $\neg$   |            | T      | 7        |
|            | 44       |          |   |          |          | L        | L        | L        | L        | Г        |      |       | 94       |        |          |   |   |          |          |          |           |          |     |       | 144      |         |   |          |               |          |          | J          | I      |          |
|            | 45       |          | Γ |          | Г        | Π        | Γ        | Г        | Г        | Г        |      |       | 95       |        |          |   |   |          |          |          |           |          |     |       | 145      |         |   |          |               |          | П        | T          | Т      |          |
|            | 46       |          |   |          | L        | L        | L        | L        | L        | Ľ        |      |       | 96       |        |          |   |   |          |          |          |           |          | Ц   |       | 146      |         |   |          |               |          |          | J          | ┚      |          |
|            | 47       |          |   |          |          |          | Г        | Г        | Г        |          |      |       | 97       |        |          |   |   |          |          |          |           | ⊐        | - [ |       | 147      |         | Ϊ |          |               |          | $\Box$   | I          | I      | ┚        |
|            | 40       |          |   |          |          |          | Г        |          | Г        |          | l    |       | 90       |        |          |   |   |          |          |          |           | ⊐        | - [ |       | 140      |         |   |          |               |          | $\Box$   | I          | I      | ⅃        |
|            | 49       | 匚        |   |          | Ľ        | L        | L        |          | L        | L        | Į    |       | 99       |        |          |   |   |          |          |          |           |          |     |       | 149      | ╚       |   |          |               |          | $\Box$   | $_{\rm I}$ |        | 4        |
|            | 50       | _        | Ш | ┖        | 乚        | L        | L        | L        | _        | L        | J    |       | 100      | ш      | Ш        | Ш |   | Ш        |          |          |           |          | - ( |       | 150      | ш       | Ш | Ш        |               |          | $\Box$   | Ц          |        |          |